

**ELECTRICALLY ERASABLE PROGRAMMABLE READ
ONLY MEMORY (EEPROM) CELLS AND METHODS OF
FABRICATING THE SAME**

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ABSTRACT OF THE DISCLOSURE

Electrically erasable programmable read only memory (EEPROM) cells and methods of fabricating the same are provided. An EEPROM cell includes an isolation layer formed at a semiconductor substrate to define an active region. A source region, a buried N+ region and a drain region are serially disposed at the active region. A memory gate is disposed to cross-over the buried N+ region. A first channel region is formed between the source region and the buried N+ region. A tunnel region is located between the buried N+ region and the memory gate and self-aligned with the buried N+ region.

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